UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,006	10/28/2003	Yutaka Shibahashi	Q78201	3669

65565 7590 07/20/2009

SUGHRUE-265550
2100 PENNSYLVANIA AVE. NW
WASHINGTON, DC 20037-3213

EXAMINER
HYLINSKI, ALYSSA MARIE

ART UNIT	PAPER NUMBER
3711	

MAIL DATE	DELIVERY MODE
07/20/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/694,006	SHIBAHASHI ET AL.	
	Examiner	Art Unit	
	Alyssa M. Hylinski	3711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 August 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-16* is/are pending in the application.

4a) Of the above claim(s) *9-14* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-8,15 and 16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *8/18/08*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 3, 6-7 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reid (4503177), Mullis (5436115), Gordon (2460221) and Tomonaga (2002/0114956). Reid discloses an element and a method for alternately expressing a color-memorizing photochromic function of the element (column 1 lines 6-21). The element has a photochromic layer that maintains a coloring state by developing a color through the irradiation of light at the appropriate wavelength such as in ultraviolet rays (column 3 lines 58-68, column 11 lines 9-16) and changes to a decolorized state through its de-colorization by the irradiation of visible light (column 1 lines 38-46 and column 4 lines 18-22). The coloring state would be visible in well lit areas (column 11 lines 9-16). The photochromic layer can be coated on a substrate (column 3 lines 52-64) and has pigments or other additives that are allowed to coexist therein (column 3 lines 58-64). Mullis discloses a sheet or film toy element having photochromic properties on which templates can be arranged to create interesting visual displays (column 19 line 67 – column 20 line 4 and column 20 lines 29-50). It would have been obvious to one of ordinary skill in the art from the teaching of Mullis to utilize the element of Reid as a toy element for placing templates in order to create an interesting

and visually appealing device that could entertain a user. Gordon discloses a method for alternately expressing a luminescent function in a toy element by arranging a sheet-shaped means (25) under a contacted or non-contacted condition (Figs. 3 & 4) and wherein the sheet-shaped means contains a light-shading pigment (column 2 lines 54-57) capable of shading at least ultraviolet rays (column 2 lines 54-60 and column 3 lines 1-2). The toy element has a light effected layer (13) coated on a sheet (12) which is illuminated (column 2 lines 1-4) through the irradiation of ultraviolet rays or sunlight containing ultraviolet rays by means of an ultraviolet irradiator (column 2 lines 5-7) and can be changed into a non-illuminated state by the irradiation of visible light when the sheet-shaped means contacts the toy element thereby cutting off the ultraviolet rays and causing irradiation of visible light (column 3 lines 7-16). Although, Gordon does not disclose a photochromic element it does disclose a toy using an element that is activated or deactivated in response to different lights and as such teaches the use of a sheet-shaped means for causing a change in a light sensitive element by affecting the light to which the element would be exposed. It would have been obvious to one of ordinary skill in the art from the teaching of Gordon to use a sheet-shaped changing means with the device of Reid and Mullis in an attempt to provide an improved toy device, as a person with ordinary skill has good reason to pursue the known options within his or her technical grasp. Furthermore, it would have been obvious to utilize the sheet-shaped means to change the effect of a light sensitive material toy such as the light sensitive photochromic toy element of Reid and Mullis for the predictable result of influencing the visual effect of the device. The combination as described allows for the

sheet-shaped means to function as a color-changing means to help maintain the changed states of the element by influencing the type of light the element is subjected to so as to express a function to memorize and maintain coloring and decolorizing states alternately. The references disclose the basic inventive concept, substantially as claimed, with the exception of the photochromic layer containing a diaryl ethene photochromic compound. Tomonaga discloses that diaryl ethane is an organic compound that exhibits photochromic properties (page 1 paragraph 4). It would have been obvious to one of ordinary skill in the art to use diaryl ethene as the photochromic compound since it has been held that a mere selection of known materials on the basis of suitability for the intended use would be entirely obvious. *See in re Leshin, 125 USPQ 416 (CCPA 1960).* With regard to claims 6 and 7 and the photochromic layer including a thermoplastic resin and the color-changing means including a transparent plastic, the examiner notes that mere selection of known materials as recited in claims 6 and 7, on the basis of suitability for the intended use would be entirely obvious. Therefore, it would have been obvious to one of ordinary skill in the art to provide the references with the materials recited in the claims in order to use known materials suitable for the intended use. *See in re Leshin, 125 USPQ 416 (CCPA 1960).*

3. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reid, Mullis, Gordon, Tomonaga and Kamada (5208132). The references disclose the basic inventive concept, substantially as claimed, with the exception of the photochromic layer having a photochromic compound that is included in microcapsules and includes a binder resin. Kamada discloses an organic photochromic compound that

is microencapsulated (column 2 lines 30-34) and can be combined with a binder resin (column 5 lines 38-44) for use with a plurality of articles such as toys (column 6 lines 20-27). The photochromic material can also be combined with a dye or pigment (column 8 lines 11-15). It would have been obvious to one of ordinary skill in the art from the teaching of Kamada to modify the coating of the references so as to include microcapsules and binder resin in order to be able to apply a photochromic material to an object that has a high resistance to light when subject to repeated use making it more durable (column 2 lines 22-29).

4. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reid, Mullis, Gordon and Tomonaga. The references disclose the basic inventive concept, substantially as claimed, with the exception of an image arranged inside the sheet-shaped compact. At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to include an image because Applicant has not disclosed that an image provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well without an image because the color-changing means would be able to change the color of the toy while being irradiated with light.

Response to Arguments

1. Applicant's arguments filed 8/7/08 have been fully considered but they are not persuasive.

2. In response to applicant's argument that Mullis and Gordon are nonanalogous art since the light sensitive materials used are different, the examiner notes that it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Mullis and Gordon relate to means of creating interesting visual effects on light sensitive substrates.

3. In response to applicant's argument that Mullis and Gordon are not combinable with Reid since the light sensitive or photochromic materials function differently, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case Mullis teaches the use of a photochromic type element as a toy by using templates to create visual effects and Gordon discloses using sheet means to change the kind of light exposure received by a light sensitive substrate.

4. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208

USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alyssa M. Hylinski whose telephone number is 571-272-2684. The examiner can normally be reached on M-F (8-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eugene Kim can be reached on 571-272-4463. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AMH
/Gene Kim/
Supervisory Patent Examiner, Art Unit 3711